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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,564

Applicant(s)

LUECK, MICHAEL F.

Examiner

PARAS SHAH

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the Amendments and Arguments filed on 09/01/2009. Claims 1, 3-10, 12-26 remain pending. The Applicants' amendment and remarks have been carefully considered, but they are not persuasive. Accordingly, this Action has been made FINAL.
2. All previous objections and rejections directed to the Applicant's disclosure and claims not discussed in this Office Action have been withdrawn by the Examiner.

Response to Amendments and Arguments

3. Applicant's arguments filed 09/01/2009 with respect to claims 1, 3-10, and 12-26 have been fully considered but they are not persuasive for the reasons noted below.

With respect to the newly amended limitations in claims 1 and 20, in order to overcome the 35 USC 101 rejections, have been considered. However, upon further consideration a new 112, 1st paragraph rejection has been made for new matter. Please see below for explanation.

With respect to the 35 USC 103 rejections, the Applicants provide responses to the response to Arguments made in the prior action. However, these arguments are not persuasive and will be addressed in light of the additional arguments on pages 13-17 of the Applicant's Remarks. The Applicants, on page 14, assert that Hummel does not determine a contextual state of a word. The Examiner respectfully disagrees with this assertion. Hummel, in col. 4, lines 2-8 and lines 18-23, specifically describes the use of context and surrounding information for the determination of the placeable. Hence, the

placeable determined varies based on context in order to translate the detected placeable correctly in the target form. The claims recite the word being read from a word list and identifying a contextual state of the word. The claim does not recite the contextual state is determined based on multiple words or words surrounding the word being read. The broadest reasonable interpretation allows context information to be identified for that word based on information designated for translation (i.e. sentence (e.g. where the sentence contains words making up a word list)). Hummel teaches this identification of contextual state, which is the placeable type, for the specific context or environment (see col. 6, lines 65-col. 7, lines 7), hence for the example of date, the knowledge of the day and month is needed to be determined for the correct placeable to be translated (see col. 7, lines 10-17) . The Applicants have not provided a specific definition of the contextual state and thus is able to be broadly interpreted. Furthermore, the Applicant asserts that viewing of each character of a token does not indicate that context is used and asserts that there is no indication that meaning of a part of a token is determined by considering other parts of a token. The Examiner disagrees with these assertions. The viewing of each character in a token in col. 7, lines 43-53 does indicate context is being used. For example, the date example, in col. 7, line 15, multiple entities exist. Specifically, 25th and January. In order to determine the type of placeable the 25 needs to be known in order to determine the *long form* date of is being invoked as opposed to speed or name information. 25 and January is associated with date (see Figure 4, 410, 420, for long date). This is the context, specifically the surrounding information (i.e. in this case left context (which is numerical)), which is in accordance

with the definition provided in the prior action. Hence, part of token is used (i.e. part of first character information constituting a number) in determining the *long form* of date (e.g. The combined characters (25th and January) results in a meaning of date information and not speed or name information, where the knowledge of the number 25 indicates either speed and numerical and rules out name information). The fact that the entire token is not viewed as pointed by the Applicant on page 11 is irrelevant since the information prior to the termination is used for type of placeable determination. Further, the dividing of the token does imply considering of parts of the token since Hummel uses this character by character analysis of the token to determine the placeable type needed for the transformation (see col. 7, lines 50-52 and Figures 4).

The Applicant on page 15 further argues that context is not identified dynamically. The Examiner disagrees with this assertion. The usage of character information in Hummel is dynamic, where the character context being read determines the type of placeable based on the previous characters that have been analyzed (see Figure 4, and col. 7, lines 50-57). This can be seen when distinguishing between date information, speed information, and name information. Further, the Applicant asserts that the fact that each character of a token is viewed does not indicate that context is determined. The Examiner disagrees with this assertion. The Applicant gives an example that when a particular pattern is found that fits a placeable then determination can be made for the token. This particular pattern serves as context information, contrary to the Applicant's arguments since the pattern constitutes a series of characters which are looked upon for the formulaic determination in order to distinguish

between a date, speed or name information. Thus, the prior portions of the characters constitute context that sheds light on the meaning of the combined words of the token.

The Applicants on page 16, further assert that there is no evidence that Hummel considers the meaning of one part of a token relative to another. The Examiner respectfully disagrees with this assertion for the reasons as mentioned above parts of a token are considered in order to determine the placeable. The claim recites the identification of context information *for a word* and not consideration of meaning of one word with respect to other words as argued as the word list as claimed can be broadly interpreted to consist of one word.

Hence, for these reasons the Applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically the newly added limitations of "a computer readable memory" and "a processor coupled to the computer readable memory" recites subject matter which was not described in the original claims,

drawings, or Specification. The Applicant assert that paragraphs [0035], [0038], [0041], and [0050] implies the use of a computer readable storage medium, the use of a process can be inferred from the discussion of software, and the use of a GUI implies the use of hardware and software. The Examiner respectfully disagrees with this assertion. The Applicants have noted that the Specification includes discussion of software (i.e. hence no discussion of hardware). Furthermore, Applicant has not been able to provide support where such limitations have been described in the Specification and relies on implied teachings. However, these teachings are not implied since a software discussion is being described as claimed at the time of filing of the Application, not directed to the combination of software and hardware.

6. Claims 3-9 and 21-26 are rejected for being dependent upon a rejected base claim.

Claim Objections

7. Claims 3, 4, 7, 8, 22, 23, and 26 objected to because of the following informalities: The Applicant cancelled the "working list module" and "formatting module" limitations from the independent claims but the dependent claims still recites these features. The limitations, which were cancelled, should be deleted and added with limitations that reflect the step from which the respective modules were previously used for in order to properly associate the limitations contained in the mentioned dependent claims. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3-10, 12-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alleva et al., Patent No. US 5,970,449 ("ALLEVA") in view of Hummel et al., Patent No. US 7,020,601 ("HUMMEL").

10. Regarding **claim 1**, ALLEVA teaches a configurable formatting system for generating a desired representation of an expression within a word list ("a context-free grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60), said system comprising:

(a) a computer readable memory (see Figure 1, primary storage 28 and secondary storage 30 and col. 3, lines 38-47) for storing:

a dictionary database ("context-free grammar 40", ALLEVA, column 5, line 26) for storing at least one category ("divided into three major sections ... '[spacing]', '[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at least one word and at least one translation rule ("includes substitute text 54 that replaces the text that was output", ALLEVA, column 4, lines 56-57);

a configuration file containing at least one variant to the contents of at least one category of the dictionary database ("the text file may be merely edited", ALLEVA,

column 8, lines 54-55), said variant to the contents of at least one category being used to overwrite the contents of said at least one category within said dictionary database ("the tree is revised accordingly by reading the contents from the edited text file altering the tree in a matching fashion", ALLEVA, column 8, lines 58-60);

(b) a processor coupled to the computer readable memory (see Figure 1, CPU 12 connected to primary memory and secondary memory), the processor configured to (see col. 3, lines 18-20, where computer system practices the embodiment)

reading a word from the word list ("words are stored within a text buffer 122 that is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining whether the word is associated with the expression by utilizing the categories of said dictionary database for said word ("processed by the text normalizer to determine whether there are any matching rules or not", ALLEVA, column 8, lines 6-7):

inserting the word into a working list if the word is associated with the expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

processing the working list when the word is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see also column 8, lines 1-27 for an example); and

generating the desired representation of the expression from the working list (see ALLEVA, column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state of a word.

In the same field of text normalization, HUMMEL teaches storing (see col. 6, lines 1, translation memory and see col. 7, lines 22-34, and lines 43-52, the use of a cache memory is implied as each character is examined of a token to determine the placeable) a contextual state (see Figure 4 and col. 7, lines 51-53, determination of a placeable occurs character by character); identifying the contextual state of a word (placeable determined based on context and environment, HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the determination of a date is determined using views of the entire token) (e.g. The said identifying is dynamic where each placeable is identified and converted based on determiner placeable type.) and determining whether a word is associated with the expression utilizing the contextual state (see col. 7, lines 44-51, where state is determined by looking at the entire token. Further, in order to determine the type of conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made check the context as taught by HUMMEL on the normalizations used by ALLEVA in order to improve the translation of data not requiring translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16 and lines 60-67)

11. Regarding **claim 3**, ALLEVA further teaches that the working list module is either in a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, working list module is in a NoCheck state (see ALLEVA, FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an example).

12. Regarding **claim 4**, ALLEVA further teaches that said working list module is further determines whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordInNumber state ('the number rule 128 is applied to replace 'twenty' with '20"', ALLEVA, column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral ("the first word, 'five,' is processed ... there will be a match within the digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see ALLEVA, FIG. 9).

13. Regarding **claim 5**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character ("if a period is followed by a space, two spaces are to be substituted for the single space", ALLEVA, column 5, lines 49-52).

14. Regarding **claim 6**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database ("before applying the rule, the text normalizer 38 looks at the next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", ALLEVA, column 8, lines 8-11).

15. Regarding **claim 7**, ALLEVA further teaches that said formatting module looks up the category associated with a word within the dictionary database (see ALLEVA, FIG. 9, rules 126, 128, and 130).

16. Regarding **claim 8**, ALLEVA further teaches that said formatting module formats the word according to the translation rule associated with the category associated with the word (see ALLEVA, FIG. 9).

17. Regarding **claim 9**, ALLEVA further teaches that the category for the word is used to format the word in association with another word within working list ("the system

seeks to apply the rule that will normalize the greatest length string within the text", ALLEVA, column 7, lines 48-49, see also column 8, lines 1-27 for an example).

18. Regarding **claim 10**, ALLEVA teaches a configurable formatting method for generating a representation of an expression within a recognized word list ("a context-free grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60), said method comprising:

(a) storing at least one category ("divided into three major sections ... '[spacing]', '[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33) in a dictionary database ("context-free grammar 40", ALLEVA, column 5, line 26), said category containing at least one word and at least one translation rule ("includes substitute text 54 that replaces the text that was output", ALLEVA, column 4, lines 56-57);

(b) storing at least one variant to the contents of at least one category of the dictionary database in a configuration file ("the text file may be merely edited", ALLEVA, column 8, lines 54-55) and using the contents of at least one category to overwrite the contents of said at least one category within said dictionary database ("the tree is revised accordingly by reading the contents from the edited text file altering the tree in a matching fashion", ALLEVA, column 8, lines 58-60);

(c) reading a word from the word list ("words are stored within a text buffer 122 that is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining whether the word is associated with the expression by utilizing the categories of said

dictionary database ("processed by the text normalizer to determine whether there are any matching rules or not", ALLEVA, column 8, lines 6-7);

(d) inserting the word into a working list if the word is associated with the expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(e) processing the working list when a word is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an example); and

(f) formatting the words from the working list and generating the desired representation of the expression from the working list (see ALLEVA, column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules).

However, ALLEVA does not disclose dynamically identifying the contextual state of a word.

In the same field of text normalization, HUMMEL teaches identifying the contextual state of a word (placeable determined based on context and environment, HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in order to facilitate subsequent handling and see col. 7, lines 25-31, 44-51, the determination of a date is determined using views of the entire token) (e.g. The said identifying is dynamic where each placeable is identified and converted based on determiner placeable type.) and determining whether a word is associated with the expression utilizing the contextual state (see col. 7, lines 44-51, where state is

determined by looking at the entire token. Further, in order to determine the type of conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made check the context as taught by HUMMEL on the normalizations used by ALLEVA in order to improve the translation of data not requiring translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16 and lines 60-67).

19. Regarding **claim 12**, ALLEVA further teaches that (c) further comprises moving between a NoCheck state or in a WordInNumber state according to the following:

- (i) when working list is empty, being in a NoCheck state (see FIG. 7, node 100);
- (ii) entering into a WordInNumber state when the word being read is associated with the expression (see FIG. 7, node 102); and

- (iii) returning to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", column 7, lines 52-54, see also column 8, lines 1-27 for an example).

20. Regarding **claim 13**, ALLEVA further teaches that (c) further comprises:

- (iv) determining whether the working list module is in the WordInNumber state ('the number rule 128 is applied to replace 'twenty' with '20"', column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral ("the first word, 'five,' is processed ... there will be a match within the digit rule 126 for this word", column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see FIG. 9).

21. Regarding **claim 14**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character ("if a period is followed by a space, two spaces are to be substituted for the single space", column 5, lines 49-52).

22. Regarding **claim 15**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database ("before applying the rule, the text normalizer 38 looks at the next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", column 8, lines 8-11).

23. Regarding **claim 16**, ALLEVA further teaches that (f) further comprises looking up the category associated with a word within the dictionary database (see FIG. 9, rules 126, 128, and 130).

24. Regarding **claim 17**, ALLEVA further teaches that the category associated with the word is used to format the word in association with another word within working list ("the system seeks to apply the rule that will normalize the greatest length string within the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

25. Regarding **claim 18**, HUMMEL further teaches that list module is further adapted to determine whether the working list module is in the WordInNumber state or NoCheck state by utilizing a context indicia, where said context indicia tracks the contextual state of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines the contextual state of the word) (e.g. The contextual state of the word is tracked by viewing the entire token for placeable type determination.).

26. Regarding **claim 19**, HUMMEL further teaches that (c) further comprises determining whether the working list module is in the WordInNumber state or NoCheck state by utilizing a context indicia, where said context indicia tracks the contextual state of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines the contextual state of the word) (e.g. The contextual state of the word is tracked by viewing the entire token for placeable type determination.).

27. Regarding **claim 20**, ALLEVA teaches a configurable formatting system for generating a desired representation of an expression within a word list ("a context-free

grammar is applied to perform the text normalization", ALLEVA, column 2, lines 59-60), said system comprising:

(a) a computer readable memory (see Figure 1, primary storage 28 and secondary storage 30 and col. 3, lines 38-47) for storing:

a dictionary database ("context-free grammar 40", ALLEVA, column 5, line 26) for storing at least one category ("divided into three major sections ... '[spacing]', '[capitalization]', '[Rules]'", ALLEVA, column 5, lines 30-33), said category containing at least one word and at least one translation rule ("includes substitute text 54 that replaces the text that was output", ALLEVA, column 4, lines 56-57);

a configuration file containing at least one variant to the contents of at least one category of the dictionary database ("the text file may be merely edited", ALLEVA, column 8, lines 54-55), said variant to the contents of at least one category being used to overwrite the contents of said at least one category within said dictionary database ("the tree is revised accordingly by reading the contents from the edited text file altering the tree in a matching fashion", ALLEVA, column 8, lines 58-60);

(b) a processor coupled to the computer readable memory (see Figure 1, CPU 12 connected to primary memory and secondary memory), the processor configured to (see col. 3, lines 18-20, where computer system practices the embodiment)

reading a word from the word list ("words are stored within a text buffer 122 that is used by the text normalizer 38", ALLEVA, column 8, lines 4-5) and determining whether a word is associated with the expression by utilizing the categories of said

dictionary database for said word ("processed by the text normalizer to determine whether there are any matching rules or not", ALLEVA, column 8, lines 6-7):

inserting the word into a working list if the word is associated with the expression (see ALLEVA, FIG. 9, words are inserted into the processed buffer 124);

(processing the working list when the word is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied", ALLEVA, column 7, lines 52-54, see also column 8, lines 1-27 for an example); and

generating the desired representation of the expression from the working list (see ALLEVA column 8, lines 1-27, FIG. 9, the text normalizer 38 applies the rules) by looking up the category associated with a word within the dictionary database (see ALLEVA, FIG. 9, rules 126, 128, and 130).

However, ALLEVA does not disclose dynamically identifying the contextual state of a word.

In the same field of text normalization, HUMMEL teaches a contextual state (see Figure 4 and col. 7, lines 51-53, determination of a placeable occurs character by character); identifying the contextual state of a word (placeable determined based on context and environment, HUMMEL, column 4, lines 3-10 and see col. 4, lines 23-26, placeable is identified in order to facilitate subsequent handling and see col.7, lines 25-31, 44-51, the determination of a date is determined using views of the entire token) (e.g. The said identifying is dynamic where each placeable is identified and converted

based on determiner placeable type.) and determining whether a word is associated with the expression utilizing the contextual state (see col. 7, lines 44-51, where state is determined by looking at the entire token. Further, in order to determine the type of conversion needed the next token is viewed, thus utilizing a context.).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made check the context as taught by HUMMEL on the normalizations used by ALLEVA in order to improve the translation of data not requiring translation to provide a proper selection of the word (see HUMMEL col. 3, lines 12-16 and lines 60-67).

28. Regarding **claim 21**, ALLEVA further teaches that the category associated with the word is used to format the word in association with another word within working list ("the system seeks to apply the rule that will normalize the greatest length string within the text", column 7, lines 48-49, see also column 8, lines 1-27 for an example).

29. Regarding **claim 22**, ALLEVA further teaches that the working list module is either in a NoCheck state or in a WordInNumber state according to the following:

(i) when working list is empty, working list module is in a NoCheck state (see ALLEVA, FIG. 7, node 100);

(ii) working list module enters into a WordInNumber state when the word being read is associated with the expression (see ALLEVA, FIG. 7, node 102); and

(iii) working list module returns to the NoCheck state when the word being read is associated with the termination of the expression ("a rule will be applied when at least a complete rule has been identified and no further portion of a rule can be applied",

ALLEVA, column 7, lines 52-54, see also ALLEVA, column 8, lines 1-27 for an example).

30. Regarding **claim 23**, ALLEVA further teaches that said working list module is further determines whether a word is associated with the expression, by:

(iv) determining whether the working list module is in the WordInNumber state ('the number rule 128 is applied to replace 'twenty' with '20"', ALLEVA, column 8, lines 23-24);

(v) determining whether the working list module is in the NoCheck state and the word is a numeral ("the first word, 'five,' is processed ... there will be a match within the digit rule 126 for this word", ALLEVA, column 8, lines 5-8); and

(vi) if either (iv) or (v) is true then determining that the word is associated with the expression (see ALLEVA, FIG. 9).

31. Regarding **claim 24**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is a punctuation character ("if a period is followed by a space, two spaces are to be substituted for the single space", column 5, lines 49-52).

32. Regarding **claim 25**, ALLEVA further teaches that the word is associated with the termination of an expression when the word is not present within any of the categories of the dictionary database ("before applying the rule, the text normalizer 38 looks at the next word 'chickens' as there is no rule that applies to the phrase 'five chickens,' the text normalizer 38 knows that it is done", column 8, lines 8-11).

33. Regarding **claim 26**, HUMMEL further teaches that (c) further comprises determining whether the working list module is in the WordInNumber state or NoCheck state by utilizing a context indicia, where said context indicia tracks the contextual state of the working list module (see HUMMEL, column 7, lines 1-51, a series of rules defines the contextual state of the word) (e.g. The contextual state of the word is tracked by viewing the entire token for placeable type determination.).

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PARAS SHAH whose telephone number is (571)270-1650. The examiner can normally be reached on MON.-THURS. 7:30a.m.-4:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571)272-7843843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626

/Paras Shah/
Examiner, Art Unit 2626

12/01/2009